IOWA CONSERVATIONIST

olume 16 August, 1957 Number 8

ANNOUNCE REGULATIONS, '57 DEER SEASON

CURRENT PROBLEMS IN WILDLIFE CONSERVATION

Richard H. Pough
reasurer, Wildlife Preserves, Inc.

For many years the greatest reat to wildlife was excessive unting, but, thanks to the efforts the pioneer conservationists of e last century, the public finally egan to realize what was happen-g. Eventually the educational ork done by these men and their rganizations made it possible to ecure laws that protected wildlife nd provided restrictive hunting easons for the balance. Except r better laws to protect a few redators, especially the hawks nd owls, this phase of wildlife nservation has largely achieved s objectives.

Legal protection brought about n immediate temporary increase practically all of the wildlife at had been heavily hunted. It as not long, however, before the opulation of many species again egan to decline and the past ecade has seen a concerted re-earch effort to find the reasons— n effort into which state and fed-ral agencies have poured millions.

While wildlife has been declining, e American public, with more isure and better roads to bring em into contact with wild areas, ave become increasingly conser-ation minded. Educational pro-rams from grade school through ollege have developed a real ap-reciation of what wildlife has to ffer as a recreational resource, nd thanks to Walt Disney's col-red motion pictures, millions now re obtaining an insight into the leasure that can be derived from closer contact with and under-tanding of nature.

It would seem that the present limate should be ideal for making reat strides in wildlife conserva-ion, and certainly sufficient re-earch has been done to disclose ost of the basic needs of wildlife. Vhy, then, are so many forms of vildlife declining in numbers? A ajor reason would appear to be

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Jim Sherman Photo

Iowa's 1957 deer season will send bowmen into action October 26 through November 25; shotgun hunters, December 7 through December 8. Hunting will be statewide for Iowa residents only. Regulations are essentially the same for 1957 as last year.

IN THIS ISSUE

Regulations for the 1957 Iowa deer season have been announced by the State Conservation Commission.

Hunting with bow and arrow will be permitted from October 26 through November 25. Deer may be hunted with shotguns December 7 through December 8.

The seasons will be statewide and will be open to Iowa residents only. Season limit is one deer of any age or sex.

Shooting hours each day for bow and arrow will be from 6:30 a.m. to 5 p.m. Shooting hours for shotguns will be from 8 a.m. to 4 p.m.

Deer may be taken with 10, 12, 16 and 20 gauge shotguns with rifled slugs only and bows of 40-pound pull or more with broad head arrows only. Crossbows or mechanical bows, the use of dogs, domestic animals, cars, aircraft, or any mechanical conveyance, or the use of salt or bait while hunting deer is prohibited.

Owners or tenants of land and their children may hunt, kill and have in their possession one deer, provided it is not removed from the land unless the deer is tagged with a metal locking seal.

Licenses will be stamped "for shotgun only" or "for bow and arrow only". The license may be used only for the season designated on the license. Bow hunters may not hunt during the gun season with their "bow and arrow" license and gun hunters may not hunt during the bow and arrow season with their "shotgun only" license.

Applications

Applications for the shotgun season must be made not later than October 14. Applications are also required for bow and arrow licenses, but there is no deadline for such applications. Hunters who wish to obtain both a bow and arrow and shotgun license should make separate applications.

Application forms for the 1957 deer season are now available from county recorders, conservation officers, and the State Conservation Commission office.

Only the new 1957 forms provided by the State Conservation Commission should be used. The

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BIRD MIGRATION

Talbott Denmead

Bird migration is a fascinating study for there is so much about it that we do not know. How it began and why birds make long trips at certain times is yet, after years of research, shrouded in mystery; and most anything that is mysterious is interesting. Thanks to the patience of our ornithologists we have learned a lot.

Many theories are advanced as to the real reasons birds in countless flocks migrate mostly from the north to the south, and from the south back again, annually; there are, of course, some migrations not north and south. Two of the principal theories accounting for bird migration are the necessity of finding a suitable supply of food, and a homing instinct; perhaps it is a combination of both in addition to other reasons we know not of. Many scientists feel sure the lack of food was at the bottom of it at the start; that at the end of the Ice Age, when the ice covering receded—let us say on the North American Continent — it started the birds on their travels, first short steps or trips, then longer ones. Plenty of food is essential when the birds are breeding and have their young to provide for; so, say some, they leave concentrated areas and go where they can spread out and rear and feed their young more or less undisturbed.

But there are migrations that are not so readily explained by this theory of food supply; for example take the long migratory flight of the Arctic tern; it breeds in the far north, the very far north, as far as land can be found, and winters some place in the Antarctic; this is an 11,000 mile migration measured in a straight line; over eight months of the year it lives in daylight; during its sojourn in the northern breeding area, the land of the midnight sun, the sun never sets.

Two Arctic tern, banded in Labrador, were picked up dead on the west coast of Africa; another was found in the Bay of Biscay; these birds probably were blown from their regular course by hurricanes, now designated as "Hazel, Alice", etc.

The other commonly accepted theory in explanation of migration, the homing instinct, had a lot to do with it in the days when the ice of winter drove the birds south at an early date; but now most of the birds spend the greater part of the year in the south, remaining at the nesting site only until their young can care for themselves. The yellow legs are a good example of this, going north in late May, returning on the southern migration as early as July. This leads one to incline towards the food theory. Guess there really is no positive and satisfying answer to the question "why do birds migrate"? Food conditions certainly have a lot to do with the migrations of our wild waterfowl; wild ducks sometimes make mistakes, and remain in the north a little too long and are destroyed by intensely severe weather and lack of food.

We also know that certain species of ducks will go farther south some years than others. Canvasbacks will remain in the waters of the Chesapeake Bay region until driven farther south by ice covering their food supply yet generally weather conditions have little or no effect on regular spring migrations. Many of our smaller migrants appear annually in spring almost on the same day of the month regardless of the weather where they come from; for example the purple grackle arrives in Washington, D. C., on February 23 with a greater regularity than some railroad trains. Certainly weather conditions have little to do with the movements of the birds that go from the northern part of North America to South America.

Some birds migrate during the daytime, others only at night. Some both day and night. The daylight travelers probably find their way, partly, at least, by land marks, but not entirely, for many migrate over vast bodies of water such as the Gulf of Mexico. Those that travel by night must have what is called a "sense of direction". This should not be doubted for many men who live in the great outdoors have a well developed sense of direction; migrating birds will continue their flight in a straight line to their objective through the densest fog.

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Jim Sherman Photo

Crowds like this, enjoying park recreational facilities, swelled Iowa park attendance figures to nearly 6 million during 1956. The statistic placed Iowa ninth in the nation in park attendance last year.

IOWA PARKS HIGH IN VISIT TOTALS

Iowa drew nearly 6 million visitors to its parks during 1956 to place ninth in the nation in park attendance, a report of State Park Statistics for 1956 by the National Park Service of the U. S. Department of Interior, has disclosed.

The Hawkeye State also was one of only 12 states in the nation that attracted 5 million or more persons to its parks in 1956. Two of the 12 reported 5 million visitors for the first time. Iowa parks had attendance larger than 5 million in 195 as well as 1956.

The state's per-park-visitor cost for maintenance and operation during 1956 was 7 cents. The national average cost for maintenance and operation was 19 cents per-park visitor.

Data submitted by 47 states for 1956 showed an upward trend in practically all categories when compared with the totals reported in 1955. Total attendance increased 9 per cent; tent and trailer camp sites attendance, up 19 per cent expenditures increased 20 per cent funds available for expenditure, up 28 per cent; revenue from operations increased 8 per cent; and personnel increased 9 per cent.

On a national basis, attendance at state parks continued its steady climb during the past year, reaching over 200 million visits for the first time.

Use of overnight accommodations as a whole rose 14 per cent over 1955 primarily because of the continued large increase in tent and trailer camping. Tent and trailer campsite use increased 1 per cent during the year thus doubling the figure of four years previous.

Funds available for expenditure remained the same as far as Iowa parks are concerned, but showed a significant rise on a national basis.

Revenue from operations also increased during 1956 and double over the five-year period. This was due chiefly to the increased receipts from operated facilities.

Personnel showed increases in several categories, although there was no significant increase in the number of Iowa employees during the period of the report. Nationally, the year-round employees increased in number about 7 per cent to a total of 6,048; seasonal employees increased 11 per cent to a total of 8,884; and fulltime professional employees increased 19 per cent to a total of 351.

Both acreage and the number of areas increased slightly during the year, but land purchase did not keep up with the increases in expenditures for other purposes. The number of areas is now reported as 2,100, an increase of 65 over 1955 while the total acreage was reported as 5,165,125, an increase of 61,544 acres.

OFFICER EXAMINATION DATES ARE ANNOUNCED

Dates have been set for preliminary and final examinations for ate Conservation Officer candiates in Fish and Game and Lands nd Waters Divisions of the Comission.

Preliminary examinations will be eld at 9 a.m., September 16. Final xaminations have been tentavely set for September 30, Octber 1 and 2. Both examinations ill be held at Des Moines and ndidates will be notified by mail the place where the examinaons will be given.

Applications for the preliminary xamination may be requested by riting the State Conservation ommission, East 7th and Court ve., Des Moines.

THERMOCLINE ARTICLE

For the information of our readers, particularly those who might want to cite in bibliography the article "Thermal Stratification": Its effect on Fish and Fishing in the July issue of IOWA CONSERVATIONIST, the following, more detailed identification of co-authors Roger Reed and C. Robert Glover is given. Dr. Reed is the Northwest Regional Fishery Manager and Glover is Chief of the Conservation Education Division of the Pennsylvania Fish Commission. The article was reprinted from the *Pennsylvania Angler* of June, 1957.

LOSS OF FISH MAY BE IN ROD ACTION

Having trouble setting the hook hen fishing with eel and pork nd lures?

A solution to the problem may be a rod of stiffer action, says the hief researcher for one of the eading rod and fish lure manuacturers.

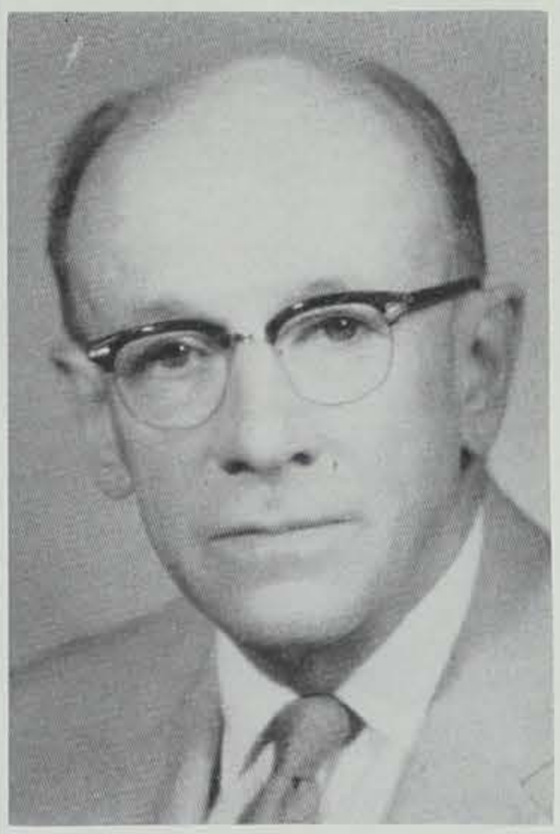
The long eel is light, as is a pork hunk, and many casters are using ight action spinning or casting ods. They get a strike, set the ook, then get that "all gone" feelng as they feel the bass pull loose.

What happens is that the bass grabs the pork and hangs on like a ulldog, because it is soft, not hard ike a plug. Then, the fisherman *THINKS* he sets the hook. Actually, he only pulls the fish through he water; the fish opens its jaw, drops the pork, and—no fish. All ecause the rod action is too light o set the hook.

With a stiffer action rod, when the bass hits, the fisherman can strike hard enough to force open the bass's jaw and get the hook properly set.

Try a stiffer rod and see if you won't need a heavier stringer, the researcher suggests.

NEW COMMISSION MEMBERS NAMED



Dr. Albert N. Humiston

Clyde M. Frudden

G. H. Meyer

Three new members of the Iowa Conservation Commission assumed their duties at a regular meeting of the Commission held at Gull Point State Park July 16.

They are: Dr. Albert N. Humiston of Cedar Rapids; Clyde M. Frudden, Greene; and G. H. Meyer, Elkader.

Appointed to six-year terms, the new members succeed Ewald G. Trost of Fort Dodge; Joseph Stanton, Des Moines; and Floyd Pearson, Decorah, whose office terms expired this year.

Dr. Humiston is a dentist and has practiced his profession in Cedar Rapids for 38 years. A past president of the Linn county chapter of the Izaak Walton League, Dr. Humiston is a member of the Cedar Rapids Chamber of Commerce and is active in the Masonic and Elk organizations. He also takes an active part in local, district and state Dental Society affairs.

"While fishing and hunting have been my chief hobbies for many years, my interests in conservation are general and not confined to any one section of the state. I sincerely hope that my usefulness to the Commission will increase as experience in its affairs is gained," Dr. Humiston said.

Frudden has been in the wholesale and retail lumber business in Greene since 1921. He served as president of the Commercial Trust and Savings Bank of Charles City and served as president of the Greene School Board for a number of years. For the past few years he has served as chairman of the Iowa Forest Products Industries Inc., and Iowa Tree Farm Committee and as co-chairman of the Iowa Forestry Association. He is active in the Izaak Walton League, American Legion and Masonic Lodge.

Frudden has stated that he hopes to center most of his Conservation Commission activities along forestry lines.

"Since Iowa's woodlands contribute so much to the agricultural, industrial and recreational economy of our state, the Conservation Commission should continue to recognize and encourage more efficient and better management of our forested areas. By setting a good example of tree use and perpetuation in our state-owned forests which total 13,468 acres, the Commission can do much to foster similar programs by others," he said.

Meyer farmed and was a breeder of Holstein Friesian cattle for 18 years. He served as clerk of the district court in Clayton county for three terms and served as state parole agent for the State Parole Board from 1938 to 1946. A manufacturer of concrete materials for five years, he is presently engaged in the real estate business.

A photograph of the present Conservation Commission may be found on page 156.

Deer . . .

(Continued from page 153)

application form is simply that, and should not be considered to have the same force as the regular license the hunter must have in possession while hunting deer.

The $10 deer hunting license fee in the form of personal check or money order should accompany each completed form when it is returned to the State Conservation Commission office.

A total of 6,000 licenses will be issued for the 1957 shotgun season. The first 5,000 applications received will be issued licenses on a first-come, first-serve basis. All applications received after the first 5,000 will be held until the October 14 deadline. If these applications total more than 1,000 a drawing will be held to determine which applicants shall receive the remaining licenses.

An unlimited number of bow and arrow licenses will be issued and they will be available until November 25, final day of the bow and arrow season.

It is expected that shotgun and bow and arrow licenses and tags will be issued as soon after September 1 as possible.

FISHING GRASSHOPPERS

Although hooking grasshoppers under the "collar" is a popular method in fishing them, don't overlook the practice of fishing them backwards, hooked near the tail. Fishing them in this manner against the current of the stream spreads the wings of the insects and makes them particularly appealing to trout.

OTTERS

The otter is a playful animal and one of the common manifestations of this playfulness is the "otter-slide" which is a steep slope down which the animals coast on their breasts and bellies, with their forelegs bent backward out of the way.

TOPS IN SPORT

The Athletic Institute reports a significant decline in youth participation in team sports between 1951 and 1956. The declines were 5.5 per cent in baseball and softball, 3.3 per cent in basketball, and 2.5 per cent in football.

We're happy to report that these figures are more than balanced by increased participation in sport fishing. In fact, sport fishing is the nation's most popular form of outdoor recreation and is also the most popular of all participating sports of any sort.—*Colorado Outdoors.*

RED SQUIRRELS

After young red squirrels are weaned, they drive their mother away and occupy the "home" nest for awhile before separating.

Glides of up to 125 feet have been recorded for flying squirrels.

FOREST IS LIKE A CITY

Upland forests provide an opportunity for the naturalist to observe a cosmopolitan neighborhood. Like New York City or the whole United States, its citizens are many and varied. There is a virtual melting pot of different species and kinds of plants living side by side. Rarely, under special ideal conditions, there are small groups of only one species. Usually the reverse is true.

Showy red flowers appear early on scattered, low-grading redbud. Dogwood, a white bloomed counterpart, also makes an early appearance. Both species seem to know that, by blooming early, they will be noticed and appreciated. These forest citizens have accepted their place on the edge of obscurity in the understory.

Hard maple, or sugar maple, is a persistent member of the understory. Although slow growing, maple lives and quietly reproduces under the stiffest competition for light and soil moisture. Unlike redbud and dogwood, hard maple is a social climber with an ultimate goal of being part of the upper crust in the stand. Eventually, the tree does grow up and become part of the main stand, much as people climb into a higher social bracket.

Small openings and good soils invite the light-loving walnut and basswood in. Quality and value are the keynotes of the aristocratic walnut. This temperamental tree citizen likes the best of everything, including an exclusive neighborhood. A few are worth more than several members of the middle-class. However, walnut is greatly outnumbered, leaving the balance of stand value with the masses.

White oaks, red oaks and numerous kinds of hickories comprise the bulk of the middle-class. They compare with the money-making working people. These determined individuals battle for growing space, crowd their neighbors, and spread their tops. Each is a good competitor, but none quite so good as the maple. Hickory often shows up in quantities during juvenile stages, but oaks usually prevail as the stand becomes older. Treated right, these species become the dependable citizens of a forest.

Red cedar, by way of contrast, is another anti-social species. This sun-loving individual is content to grow any place other species cannot, or are not growing. Cedar grows naturally on thin soiled, dry, rocky areas. Most of the oaks and other hardwoods look upon such sites as forest slums, an outlook pleasing to the cedar.

Inspect an abused area to find post oak or blackjack oak establishing residence. Forest fires and livestock grazing are often responsible for conditions favorable to such relatively worthless individuals. Correcting the abuses permits the more demanding white oaks and red oaks to become established.

When the citizens of a forest are compared to residents of a city, the similarity is striking.

A city has its social classes—a forest, its species. Let a neighborhood become rundown and watch the more desirable individuals move away. Crowding is favorable to one tree or person, and virtual death to another. Brief moments of glory satisfy some—others need to be in full view all their lives. There's good and bad in both societies with eternal life the goal of all.—*Missouri Conservation Commission.*

IT'S A RABBIT, OR IS IT?

"A rose is a rose is a rose is a rose . . . "

It's a good thing that the poet who said that was talking about roses and not rabbits or she might have been in trouble with the biologists.

For instance: The domestic Belgian hare isn't a hare, but a rabbit. The jack-rabbit isn't a rabbit, but a hare. The snow-shoe rabbit is a hare, too. His real name is the "varying hare."

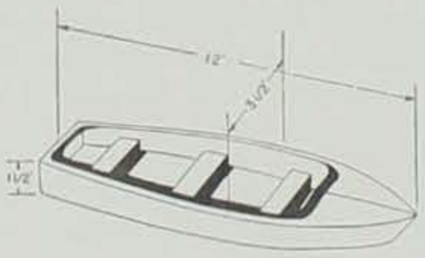
What's the difference? Here are some: Hares have longer legs and ears than rabbits. The structure of their digestive tracts is different. Hares are born with their eyes open and their bodies covered with hair. The newborn rabbit is hairless and has his eyes closed for a week or more.

What about the little cottontail? He's a rabbit!

KNOW THE CARRYING CAPACITY OF YOUR BOAT IT MAY SAVE YOUR LIFE

THIS BOAT HAS A SAFE CAPACITY OF 473 POUNDS

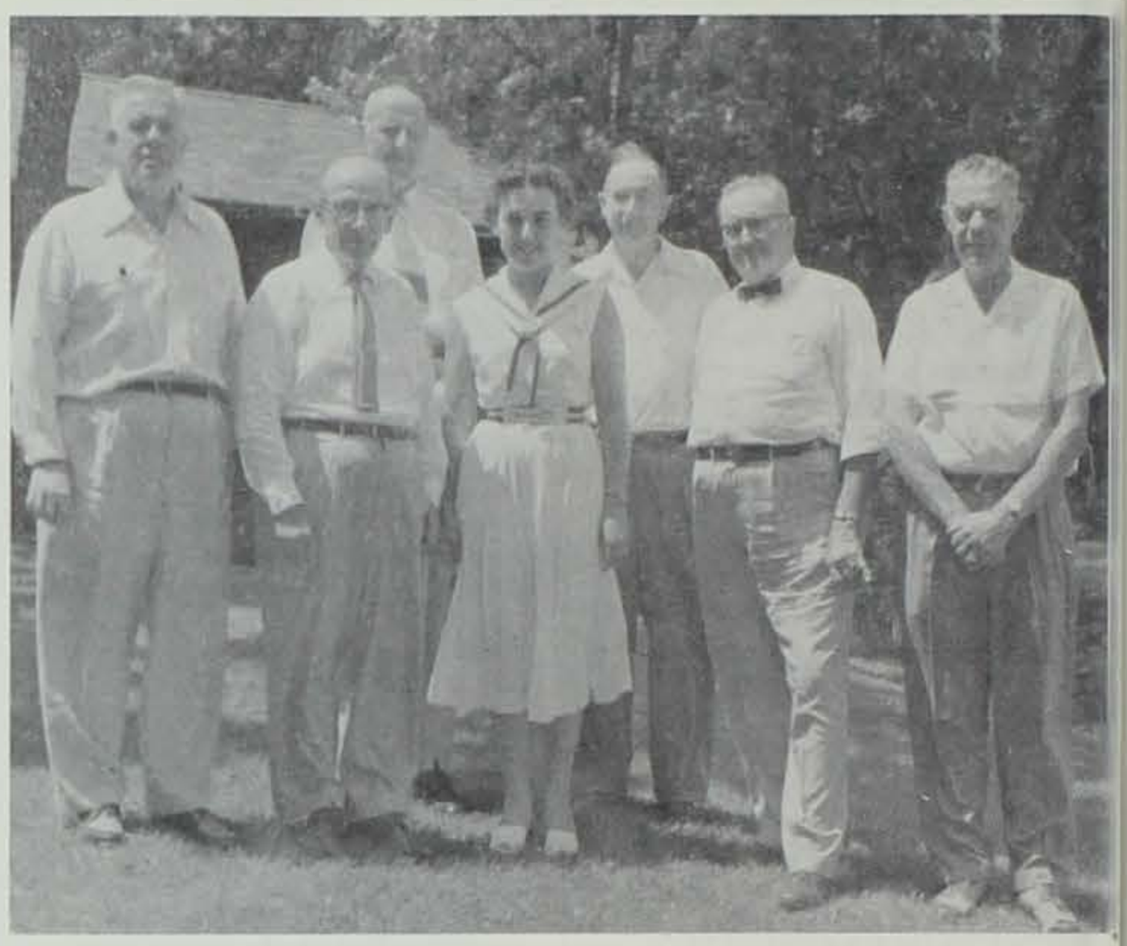
$$\left(\frac{12 \times 3.5 \times 1.5 \times 0.6}{12}\right) 150$$



REMEMBER—Make adequate allowance for the weight of your motor and equipment.

HERE'S HOW TO COMPUTE IT

Length times maximum width, times maximum depth, times 0.6 divided by 12, multiplied by 150, except where the beam measurements are 48", use 19" as maximum depth; 49" to 52", use 20" as maximum depth; 53" to 56, use 21" as maximum depth; 57" or over use 22" as maximum depth. (Outboard Boating Club of America Formula)



Conservation Commission members took time out from Commission duties for lunch an this photograph during a regular meeting at Gull Point State Park July 16. Left to right front row, are J. D. Reynolds, Creston; Dr. Albert N. Humiston, Cedar Rapids; Mr John W. Crabb, Jamaica; G. H. Meyer, Elkader; and George V. Jeck, Spirit Lake. Bac row, left to right, are Clyde M. Frudden, Greene; and George M. Foster, Ottumwa. Jec was elected chairman and Mrs. Crabb was named vice-chairman of the Commission a the meeting. They will serve one-year office terms.

BY ANY NAME A FISH IS—A FISH

A standard check list of common names for principle American spor fishes has been developed by a Committee on Names of the America Fisheries Society. This will do much to clarify the confusion caused b the application of many common names to a single species. Some o these of particular interest to Iowa anglers are:

COMMON NAME	SCIENTIFIC NAME
Bass, Largemouth	Micropterus salmoides
Bass, Rock	Ambloplites rupestris
Bass, Smallmouth	Micropterus dolomieui
Bass, White	Roccus chrysops
Bullhead, Black	Ictalurus melas
Bullhead, Brown	Ictalurus nebulosus
Bullhead, Yellow	Ictalurus natalis
Carp	Cyprinus carpio
Catfish, Channel	Ictalurus punctatus
Catfish, Flathead	Pylodictus olivaris
Chub, Creek	Semotiuls atromaculatus
Crappie, Black	Pomoxis nigromaculatus
Crappie, White	Pomoxis annularis
Drum, Freshwater (Sheephead)	Aplodinotus grunniens
Gar, Longnose	Lepisosteus osseus
Gar, Shortnose	Lepisosteus platostomus
Paddlefish	Polyodon Spathula
Perch, Yellow	Perca flavenscens
Pike, Northern	Esox lucius
Sauger	Stizostedion canadense
Stonecat	Noturus flavus
Sturgeon, Shovelnose	Scaphirhynchus platyorynchus
Bluegill	Lepomis machrochirus
Sunfish, Green	Lepomis cyanellus
Sunfish, Longear	Lepomis megalotis
Pumpkinseed (Sunfish)	Lepomis gibbosus
Trout, Brook	Salvelinus fontinalis
Trout, Brown	Salmo trutta
Trout, Rainbow	Salmo gairdneri
Walleye	Stizostedion vitreum

BROOK TROUT

The food of the brook trout consists largely of caddisflies, two-winged flies, mayflies, scuds, mollusks, fish and freshwater shrimp.

Land insects make up an appreciable percentage of the rainbow trout's diet during the summer months.

ROAD RUNNERS

The road runner, one of the mos familiar birds of southwester and western United States, take its name from its habit of runnin along the road in front of wagon or any other slow vehicle.

HOPPERS IN A BUCKET? MAY SOUND STRANGE BUT IT TAKES PRIME BAIT

About this time every year, the rasshopper comes into his own as prime bait for trout, bluegills nd catfish.

Also about this time each year, portsmen up Winneshiek County ay must do the "double-take" if hey happen to witness Conserva- ion Officer Bob Daubendiek's ethod of catching them.

Equipped with a common, ordi- ary bucket into which he has laced a couple of inches of water, Daubendiek swings the bucket in large arc before him as he ramps high weedy and grassy reas where large populations of hoppers abound.

As the 'hoppers take to the air number tumble into the swing- ng bucket. Once inside, the water n the bucket keeps them water- ogged and unable to jump or fly ut of the bucket.

You don't need much water, says Daubendiek, just enough to keep he captured 'hoppers well down n the bucket. If you have too nuch, the 'hopper can climb the ides and—oops—he's flitting back o rejoin the family circle.

Daubendiek says the method vill take all the 'hoppers the ang- er wants in short order and with minimum of equipment. If the upply runs low, a few swings of he bucket produces more and the isherman is back on the stream vith plenty of bait.

Catching 'hoppers by the bucket nethod may sound strange, but if t works it's worth a try particu- arly for the angler who wants prime bait in a hurry and does not need it in large quantity. After all, who can argue with success?

NATIONAL GOOSE CALLERS TO COMPETE SEPTEMBER 28-29

Missouri Valley will be host to the 1957 World's Championship Goose Calling Contest on September 28 and 29 with goose callers from throughout the nation competing for an array of prizes.

A crowd larger than the 10,000 who attended the event last year is expected to be on hand for the 1957 edition of the contest.

Winner of the event will receive a $1,000 defense bond and trophy.

Second prize will be a fibreglass boat and third prize will be a 12-gauge shotgun.

A World Champion Junior Goose Calling Contest will be included in the program this year with prizes for each of the first ten winners in senior and junior divisions.

Special attractions at the contest will include Herb Parsons of Winchester Western and Ben Pearson, the world famous archer from Pine Bluffs, Arkansas.

The contest is free to the public.

Current Problems . . .

(Continued from page 153)

that in the wildlife field we have come too often to regard conservation education research as conservation objectives instead of recognizing that, while they are important, they are simply means for achieving the ultimate end—namely, the actual conservation of living plants and animals. In short, unless conservation education and research ultimately lead to positive action on behalf of wildlife, they are sterile.

The wildlife research work of recent years has left no doubt as to the type of action that is needed. One project after another has indicated that most wildlife declines are due to shrinking habitats. Herbicides, insecticides and clean farming are making agricultural lands increasingly unsuitable for wildlife. More intensive management of woodlands is resulting in the loss of the dead and "over-mature" trees that provide homes for so many species. New earth-moving machinery is making the drainage of wetlands easier. Unrestricted urbanization of land around our growing cities is leaving no remnant of the various types of habitats that originally gave variety to the local wildlife.

Clearly what is needed is a new dynamic conservation **action** program that will provide the leadership and the funds that will be necessary to stimulate the setting aside of more land for wildlife in the form of parks, refuges, sanctuaries, natural areas, public hunting grounds and the like, where the requirements of wildlife and those who wish to enjoy it will receive top priority. Given substantial support, such a program could accomplish a great deal in a few years and influence land use in a way that would pay dividends in pleasure and health for millions of Americans for centuries to come.

However, the need for immediate action is very great. Virtually all of the nation's remaining privately owned wetlands are in great danger. Throughout the country, land-use intensity is rising, land prices are rising, and patterns of land use that are largely irreversible are being set. All the wildlife that coming generations will ever know is that for which we provide permanent homes, through the preservation of units of the various special environments they need for survival.

FOR RED WORMS

For a deeper red color that is more irresistible to fish, try grinding bricks and mixing the powder into the dirt in which you keep your earthworms.

MOOSE CALL

The bull moose's mooing call ends with an upward inflection or throat gulp; the cow's is longer and not as loud—more like that of a domestic cow.

Jim Sherman Photo

A new dynamic conservation program is needed, which will provide leadership for future generations. Working with our youth is one of the best means of attaining this goal.

* * * * * * * * * * * *

Bird Migrations . . .

(Continued from page 154)

Tiny warblers annually travel thousands of miles guided by—something.

Many birds do not take the same course on their north and south migrations; the uninformed who see birds go south but never return insist the birds never come back north. The reed bird, or bob-o-link, is such a bird. Countless hordes of these birds annually go south along our Atlantic coast, returning by a more inland route. There are, of course, good reasons why certain species have adopted a night or a day migration; again it is the food problem. Birds such as the warblers, flycatchers, and orioles feed during the day on insects that are not available at night, so they travel at night and feed all day; ducks that migrate by day can feed at night. Many birds travel slowly and feed as they go; the cliff swallow is a good example of the slowly moving migrant; it will average 20 miles a day for the first 20 days of its 2,500 mile flight from winter to summer home, increasing its speed of travel to 60 miles a day as it nears the end of the journey, feeding to a greater extent during the early stages of its migration.

It is said the gray-cheeked thrush makes its 4,000 mile trip from Louisiana to Alaska in about 30 days or at the rate of 140 miles a day. Thousands of canvasbacks fly from the Great Lakes to the head of the Chesapeake Bay on a non-stop flight. The well known Canada goose is a typical migrant; its arrival from the south heralds to many the approach of spring; probably these great game birds are more influenced by weather conditions than most other species.

The well known bullbat or night hawk breeds as far north as the Yukon, many winter in Argentina. The Carolina rail, with its slow lumbering flight is still believed by some to make a part of its migration on foot; this is just as foolish as the old legend that frogs turn into rails; the fact is that it has the longest migration flight of any of the rails, and easily crosses the Caribbean Sea. We are told incidentally, that more than 100 species of birds leave the U. S. and spend what is our winter in Central and South America; some go all the way to Patagonia, and these birds know exactly where that is even if some of us do not.

Some of the golden plovers of the Pacific Coast, hatched in Alaska, fly 2,000 miles across the ocean to the Hawaiian Islands, and never miss. Others hatched east of Alaska fly south along the Atlantic Coast, both day and night to Argentina; these come back, mostly, through the Mississippi Valley in the spring. The woodcock confines its migration within the United States and Canada. It is an erratic and mysterious bird. The mallard is found in almost every part of the United States, but does not migrate in any considerable numbers into Mexico. On the other hand the pintail does, and probably is their most plentiful duck.

For no apparent reasons ducks sometimes change their migratory routes; perhaps this is caused by food and weather conditions; the Ross's goose breeds in Canada, (Arctic Islands), migrates south as far as the Bear River Marshes in Utah, then swings west into California where it winters. Redheads wander a lot; banded on the Bear River Marshes, Utah; they have been recovered on the Chesapeake Bay. Swans congregate on the Susquehanna Flats, Maryland, in the spring before migration, and generally leave that place on or about March 23rd or 24th for the Great Lakes; the Flats are full of swan until one morning with a great noise they all take off not to return until the following fall.

Yes, it is all interesting, this bird migration, important and mysterious.

Jim Sherman photo.

A conservation officer inspects a multiflora rose fence on an Iowa farm. Rather than take a pessimistic view of the objectives of good conservation, the farmer has "rolled up his sleeves" and has done something to further its aims—providing nesting and sheltering cover for wildlife.

* * * * * * * * * * *

CONSERVATIONISTS ALL!

Someone has said that everyone is in favor of conservation . . . for the other fellow. At least today we can say that everyone is aware of conservation and is in favor of conserving everything.

Theodore Roosevelt once said, "The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value." Teddy was one of our first vocal conservationists and because of his position and his zeal, he got a lot of people at least thinking about the wise use and management of our natural resources.

In as short a time as half a century this awareness has come about. Men like Carl Schurz, Gifford Pinchot, and Van Hise were scattered voices crying in the wilderness. Today these voices have grown to choruses. We have groups vocal enough to impress Congress . . . even big business. Groups interested in minerals, wild flowers, song birds, game birds, fish, forests, national parks, wilderness areas, etc., meet regularly in every city across the land.

The fact that just recently it was decided that a $750 million project of damming the upper Colorado River could be located outside the boundaries of a national monument, instead of inside the monument where the engineers had decided it would go, speaks well for the puny whispers of thousands of individuals that swell to a roar if necessary.

The United States has about gone around the complete Conservation Cycle which starts out with the myth of resource inexhaustibility and ends when that myth is completely exploded. A comparatively few years ago, our country was really a prize package of natural resources, and the national resources were neatly wrapped up in vast forests or in endless carpets of lush grass.

Someone said a Tarzan could have taken to the trees in Maine and might have swung his way, branch to branch, to New Orleans without touching the ground. East of the Mississippi River to the Atlantic Ocean was an unbroken stretch of forest.

To the west on the plains grew a sea of grass so high that one needed to be on horseback to see over the waving heads. And to the settlers, these were not natural resources . . . these were barriers, and year in and year out they did their best to destroy them.

All the old countries have gone through the Conservation Cycle. We were different in that our energy and technology made it possible to span the cycle in six generations instead of a thousand years.

Now that the cycle is slowing down, many have become interested, even aggressive, in the cause of conservation. Four groups are especially active, and as you might expect, they are poles apart.

The "Sentimentalists"

The first group includes a lot of mighty fine people who look upon our natural resources with starry eyes. They have given of their time and money to preserve these wonders. They have been alert to exploitations of every kind. They regard our natural resources with reverent awe, and here realism ceases; they regard a resource as something to be worshipped but not used.

They refuse to admit that a given area will support only a certain deer population and that starvation is crueler than the hunter's bullet. "Only God can make a tree" they chant and refuse to go along with the idea that trees should be treated as crops and harvested when they become mature.

These people are often labeled "sentimentalists." To President Taft has been attributed the common definition of conservation, that is ". . . the wise management and use of our natural resources for the greatest amount of good . . . for the greatest number . . . over the longest period of time." These "sentimentalists" could not accept this definition for they will not admit to use of our natural resources.

The "Gloom School"

The second group is also well-meaning but because of their generally pessimistic attitude toward conservation they are often spoken of as the "Gloom School." They see nothing ahead but disaster. Our rivers are helplessly polluted; our soil is hopelessly gone and cannot be restored; our wildlife is on the way out, soon to join the extinct dodo bird, passenger pigeon, and the Merriam elk; trees will soon be found only in the national parks, and then probably Congress will make homesteads of those. That the United States has been producing surpluses from our "worthless soil" does not impress them.

Several years ago as a ranger-naturalist, I was working with a large number of boy scouts on a gully-stopping project. The boys were doing good work and the job was moving toward completion. They were certainly deserving some praise for their zeal, so I brought in a young professor from a well-known university to congratulate them and urge them on to complete the project.

What a harangue he gave them. It was 100 per cent dismal. He painted a vivid and hopeless picture of America's natural resources. How puny, he observed, were the boy scouts efforts when the Colorado River was carrying away a million tons of sediment every day!

After he was gone, I had my hands full. He had taken all the wind out of the boys' sails, and I had to huff and puff to get them back on the project again.

If you have been following conservation literature, you can name a dozen books of the "Gloom School" that have appeared during the last twenty years. Often they have been on the "best-sellers" list. Undoubtedly they have often done much good by awakening adults to the realization that as far as our natural resources are concerned, it is later than we think. But the statistics of the "Gloom School" are too strong a diet for the young.

The "Cornucopians"

A third group has been labeled the "Cornucopians." These are the optimistic ones who regard all other conservationists as worry warts.

Their cheerful philosophy runs something like this: We're living in the best possible world, and if man destroys much, he creates more. To be sure 57,000 babies are added daily to the world's population. We're living longer than ever before in history, fewer are dying in infancy. Within a hundred years the world's inhabitants will number three billion instead of two and a half billion. We're conquering disease, famine, floods, and we're praying for a warless world. True our oil wells will be dry in 20 more years. Our high grade ore will be gone before that. But man is inventive; his technology will solve his problems.

One of the pleasantest resource banks stressed by the "Cornucopians" is the ocean! Some day, they declare, it will be the answer to most of our problems of shortages. Doesn't everything on land sooner or later reach the sea? And once it goes to the sea, can it escape? It cannot! All we have to do is to devise ways . . . and man's ingenuity can do anything; well, next to anything . . . of recovering the ocean-held minerals. Do we need tin, copper, manganese, antimony . . . go to the sea. Extract it from the ocean depths.

As for feeding the teeming millions of mankind, just go to the broad meadows of the sea. There are millions of acres of plankton waiting to be served up as appetizing food containing all the protein, fat, carbohydrates, vitamins and minerals necessary for proper nourishment and growth.

This group the members of the "Gloom School" call the wishful thinkers.

The Total Conservationists

There is a fourth group made up of action conservationists. They are doers. They aren't making a lot of noise, but they are putting conservation practice into action. They are reforesting our hills and getting at the cause of water pollution. They don't feel it necessary to reach the creel or bag limits every time they go hunting or fishing. They are experimenting with oil shales in order to have a liquid fuel when the oil wells run dry. They are experimenting with taconite to have a source of steel when the high grade ores are gone. They are taking worn-out farms and with the advice and encouragement of the Soil Conservation Service are transforming them into better, more productive soil than they ever were.

Someone has defined civilization as a race between education and catastrophe. The job now seems to lie in educating oncoming generations in ecology and a sensitivity toward all resources. A great many agencies, public and private, are lending their aid to see that this indoctrination occurs. Last summer 200 institutions of higher learning offered conservation laboratories for teachers, and thousands of educators gave up summer jobs and vacations to study resources.

There are over 2 million 4-H Club members in America, twice that number of youths in Boy Scouts, Girl Scouts and Camp Fire Girls, and millions more in scores of other youth groups across the land, all of whom receive some training in conservation.

The oldsters are doing pretty well although there is more business in their activity than sentiment. There are some of them who are still believers in an ever expanding economy, one, apparently, that has no conceivable limits. They believe if we don't keep expanding, beating last year's record, raising the standard of living etc., something will pop! Their numbers are declining. Sweden and Denmark realized long ago that their boundaries and ambitions had limits. Their forests, for example, have been managed for a hundred years and show no sign of going out of business. Nothing popped.

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WHAT BIRDS SAY

J. L. Van Camp

One of the early questions asked y children is "What is that bird or animal) saying?" Sounds ade by a rooster crowing, or a obin singing, must mean some-ing. Children like to treat every-ing, even toys, as if they were live. It is natural, also, that they ould think of bird and animal ounds in human terms.

A parent or grandparent with nagination, and a lively interest n children, can give a rich heritage o a child in the wonders of nature, om farm or field. Early experi-nces produce the most lasting emories of a lifetime. An inter-sting but reasonably accurate hanging of bird and animal ounds into everyday words helps hildren learn. Often this is useful n giving a lasting interest in na-ure study and the out-of-doors.

One of the earliest spring songs child can hear is that of the obin. Perhaps a biologist might rove that bird song is a warning, eeping other birds away from the esting area. However, I feel with nany others that the robin is say-ng "Cheer up, cheerily, cheer up heerily," as the song was pointed ut by my grandmother, a nature over with imagination and humor.

Sweet Songs

Many birds' songs are "sweet," he most pleasant sounds of early spring. Pleasant songs, in addition o that of the robin, include the gentle warble of the bluebird, the arol of the song sparrow with its usual three-note beginning, and he rippling song of the goldfinch or "wild canary." All sing sweet and enjoyable songs.

The maple syrup season is greeted by the "sugar" bird, for the mountain folk in the Ohio Val-ley. A grey, sparrow-sized bird, the tufted titmouse, calls "sugar, sugar, sugar" in a clear, high whistle. This tone is heard when maple syrup making is in full swing. Thus we are happily greeted very early in the year. In fact, we hear bird songs even back into the winter months. The black-capped chickadee meets the woods-man on the coldest winter days. His cheerful "chick-a-dee-dee" or "cee-dee-dee" songs are sometimes the only sound in the winter wood-land.

Warning Calls

Birds use many warning notes, which even humans know as alarm calls. The robin scolds loudly at the sight of a cat or squirrel, shouting "chief-chief." The real alarm note of the woods, however, is given by the bluejay, called Sammy Jay in Thornton Burgess' books. He cries "thief-thief," whenever Reddy Fox appears. Bluejays often bother the hunter, by giving the alarm when they see him and thus scare off the game he was hunting.

The crow has keen sight and often gives notice that a man is in the woods. He seems to say "haw-haw" instead of "caw-caw," when danger threatens. An uproar really begins when crows find an owl in a tree during the daytime. They stage a regular riot, with mad cawing, flying and taking alarm, as the owl moves from place to place to avoid them.

Comical Bird Notes

Those with a sense of humor think many amusing sounds are made by the birds. It is also amusing to watch the pumping of head and tail of the crow, when giving his call. Red-winged black-birds and grackles go through some of the same motions. Even the barnyard rooster seems to find it quite an effort to crow.

One of the strangest sounds in the bird world is that made by the bittern. This marsh bird has other names, such as stake-driver, thun-der-pumper or marsh hen. The sound is hard to describe. Older people compared it to the noise of a wooden pump. This means little or nothing to us today. However, if you can imagine a cow walking through the muck of a very sticky marsh, the "unk-ka-bok" sound of each step is similar.

The sound of the olive-sided fly-catcher was fixed in my mind by the late Dr. C. D. Howe, on the shores of Lake Abitibi, a great many years ago. The clear, three-noted call was new to me then. Dr. Howe jokingly said the bird was saying "hic, three beers." "Hic, three beers" still means the olive-sided flycatcher for me to this day.

Sounds of Mystery

Many strange or unknown sounds of the night are made by birds of the marsh, the lake or the deep woods. Perhaps these gave us some of our early memories of camp, or the farm. Even in the cities, the evening call of the night-hawk from the dusky sky gives a mellow, slightly sad feeling. The "peenk" note of the calls is some-times broken by a loud boom. This is made after a steep dive, followed by a sudden upward turn, during which the night hawk's wing feathers vibrate, giving the loud zooming tone.

The strangest night sounds made by birds are those heard in a lone camp on a lakeshore, without the sight of another camp fire, or any human sound to break the still-ness. The shivers may suddenly run up your spine as a hoarse squawk in deep bass suddenly sounds almost overhead. A great blue heron, flapping away from you, gave this sudden squawk when the sight of you startled him on his nightly tour of lakeshore fishing and frogging grounds.

The night echoes may begin to ring with the call of the great horned owl, back on the ridge. You are often puzzled by the strange tooting of the barred owl. Owls can be recognized by the number of notes in the call. The horned owl hoots two, four or six times. The barred owl always calls eight times, with the last note going down. This sounds like someone strangling, or gargling, and may scare the newcomer, but only amuse the rest.

In the South the barred owl is known to the Negro people. In the warm safety of the cabin, they say the barred owl is asking, "Who cooks for you, who cooks for you all!"

A bird seldom seen is the whip-poor-will. Once a group of us de-cided to count the number of times this bird could say "whip-poor-will" without stopping. The bird to which we were listening said "whip-poor-will" 167 times, and took a deep breath and did 92 more.

The call of the loon reflects the spirit of the northern lakes. The wild daytime calls, which make the loon sound like a maniac, at night are beautiful calls, heard as the birds fly swiftly from one feeding ground to another. If you should wake in your blankets beside the lakeshore embers of the campfire, you might hear, out of the clear, starlit stillness, their ringing three-toned night call. Those who have heard these lonely calls al-ways remember the Canadian northwoods. Sounds such as this help bring us back, year after year, to the peace and quiet of the

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GOOD FIRST HATCH OF CANADIAN DUCKS

A good first hatch of waterfowl, comparable to that of 1952, has come off in the prairie provinces of western Canada. . . . Mallards and Pintails showing fine broods in daily increasing numbers and some Canada Goose broods have been observed. . . . At the moment, it's a case of broods "popping out all over".

Such is the key news contained in recent issues of the Ducks Un-limited "Duckological", prepared by Chief Naturalist Bert W. Cart-wright.

The report reveals that this year the birds arrived on the breeding grounds some one to two weeks earlier than usual. Off to this early start, many birds were able to avoid effects of the waterfowl-de-structive agricultural summer fal-lowing. The cast start apparently is resulting in a fine first hatch.

Cartwright has this interesting observation. . . . "Surface water conditions have continued to de-teriorate in the southern sections of all three provinces but the birds, not so dumb as some people would have us believe, largely by-passed the dangerous areas to concentrate in the safer, well watered central and parkland areas. Scattered throughout the dried-up areas are permanent lakes, rivers and man-made impoundments, including the irrigation districts and nearly 200 D.U. projects, which were designed and located to meet the onslaught of drought. Today they are heavily populated with breeding ducks and are paying huge dividends.

May transects in the three prai-rie provinces revealed a definite shift of waterfowl from drought-affected areas to the central and parkland belts in each province. Returned waterfowl population at least as good as that of last year in Alberta and Saskatchewan. Manitoba showed a 1957 increase of 17%. The season is developing very satisfactorily with only some rain needed to keep present wat-ered areas in good shape.

Mallards stir above an Iowa field, and, although summer hardly calls for much excitement about such a scene, there is good news for Iowa hunters from Canadian nesting grounds where such scenes are commonplace this time of year. Ducks Unlimited has reported a good first hatch of waterfowl in Canadian nesting grounds giving indications of good hunting when ducks wing over Iowa this fall.

"Litterbug" is Theme Of Youth's Essay

Editor's Note: Although "litterbug" activity is most noticeable at the start of the summer season, he is nevertheless present through the summer and fall. With this in mind, the Conservationist is privileged to print the following essay by Philip Reisetter of Jewell. Philip, a seventh grader, is a member of the Boy Scouts and an ardent conservationist. It is Philip's first essay and perhaps will serve to remind all who love the outdoors to do their part in keeping it beautiful and litter-free.

DON'T BE A "LITTERBUG"

Every spring an insect hatches that is commonly known as the "litterbug." This insect inhabits the highways, lakes, streams, parks, picnic grounds, cities, buildings, natural woodlands, and other places too numerous to mention, but always where there are people. This bug is easily identified because he can always be found littering up natural beauty. He is easy to follow because he usually leaves a trail of litter strewn along the highway.

Many times there are whole armies of "litterbugs" grouped together in towns, cities and factories. These armies usually do their share of littering up the United States by pouring tons and tons of refuse into creeks, rivers and streams. Most of all the "litterbugs" work in either small groups or alone, especially in parks. I have been to places to enjoy a picnic, but after seeing the place, I would have much preferred eating at home.

This harmful pest does a complete job of leaving behind such things as cans, bottles, paper, food and many, many other things, This pest is truly a black mark on the beauty of America.

You may be wondering what you can do about this pest and the only way you can deal with him is to exterminate him. First of all you must know who he is. You and I, the American people, are the "litterbugs," and the only way to overcome it is to leave our trash and refuse in public garbage cans, or any other receptacle intended for this use.

PHILIP REISETTER,
Seventh Grade,
Jewell, Iowa.

GUN SAFETY POSTERS ARE NOW AVAILABLE

Sportsmen's groups wishing to provide shooters with timely hunting safety reminders may be interested in the 1957 Hunting Safety Poster series now available from the Sportsmen's Service Bureau.

The eye-catching posters feature four shooting safety reminders: Look Before You Shoot; Watch That Muzzle; Be Sure Before You Fire; and Think, Your Trigger Can't.

The posters are available at half-cost when ordered by sportsmen's groups in quantities of 100 or more. The cost of each placard is a little over 2 cents, with no charge made for handling and shipping. The name of the sponsoring agency or group can be imprinted on each placard at cost, if desired.

The posters are suitable for display in hunting lodges and camps, service stations, roadside eating places, sporting goods stores, game checking stations, and the many other places where hunters congregate or pass.

Inquiries about the posters should be addressed to the Sportsmen's Service Bureau, 250 East 43rd Street, New York 17, New York.

Splake Unsuccessful In Ontario Trial

In the past few years, many folk have been extolling the virtues of a new fish as the latest "answer" to fisherman's dreams. It is the splake—a fertile hybrid between the brook trout and the lake trout.

Latest report on use of this fish comes from Canada, where the cross was developed. In 1953, the Ontario Department of Lands and Forests stocked 3,600 splake in Chryster Lake.

Now the Department reports that most of them have vanished, with few ever being caught. A few may still survive as scarce but large fish. They attribute disappearance to presence of pike in the lake.

Possibly it is another example illustrating that stocking—just one among many tools of management—continues to be overstressed as the "answer." It is seldom the answer by itself. The craze for seeking and introducing new fish will continue to be the Achilles' heel of fish management, until its proper relationship becomes generally understood and accepted.—*Sports Fishing Institute Bulletin.*

Conservationists All . . .

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Government has helped tremendously, especially in its grass roots employees, the county agents. The Soil Conservation Service works in 2,300 districts and includes three-fourths of all the farms and ranches in the nation. The tree farm idea has spread across the entire country and is steadily growing. Agriculture, especially in the South, has made an amazing comeback. One could go on citing happy examples of individuals, companies, and areas that are correcting their ways and are getting on the conservation train.

There are still many problems. We're still cutting our saw timber faster than nature can replace it; our rivers still stain the waters far out to sea; slum clearance is slow; dust storms gather. However, the patient has passed the crisis, his morale is good, and he is at least headed toward recovery. While conservation will never be a religion to most Americans, it is becoming a way of life, forced on them by necessity. Americans are intelligent enough to accept the concepts of conservation and to govern their lives by it.—*Carsten Ahrens* in *Pennsylvania Game News.*

What Birds Say . . .

(Continued from page 159)

northland.

North Woods Melody

Waking up next morning, the sparkling sunlight and blue waters of the lake find us ready for daytime fun. One of the first sounds heard is the song of the white-throated sparrow, known from the New England states to the Canadian woods. The New Englander thinks the bird says "Old Sam Peabody, Peabody, Peabody." The Canadian hears the song as "Oh, sweet Canada, Canada, Canada."

During the daytime, there are many enjoyable bird songs from the woods, the cedar swamps or the lakeshore. One of the hardest birds to find sings a beautiful bubbling nine-second song. This is the winter wren, a tiny singer which hides near the ground. Ontario's Dr. W. W. H. Gunn has made a tape-record of this melody. Dr. Gunn shows the range and number of notes in the winter wren's song, by slowing down his tape recordings to half and quarter speeds. This lowers the "pitch" one and two octaves. When the song of this tiny mite is thus heard, opera singers would have difficulty in singing as well as this five-ounce bird.

Evening Songs

When evening comes, the thrushes take over, though the ringing song of the wood thrush may have been heard at intervals during the day. The song of the veery is one of the most perfect. If you can imagine the chime of clear golden bells going from higher to lower notes, you may come near to it. Some folks like the song of the hermit thrush, or even the belltones of the wood thrush, for evening vespers. Hearing any of the native thrushes in their woodland homes is one of the highpoints of summer.

Many of our birds are good "mimics." Here the catbird, brown thrasher and the mocking bird must surely be listed. The yellow-breasted chat is another mimic, and he is also an acrobat and a clown.

Bird songs are interesting to people who must stay indoors. Even those who have lost their sight, but not their love of nature and the out-of-doors can fully enjoy this pleasure. A good teacher can point out bird songs for children or adults, even when the bird itself can not be seen. This has brought cheer and happiness to many people who have to stay within four walls, and to those who cannot see.

Some bird songs bring back the "good old days." Few humans will ever again hear the sound of the whooping crane. Only a few of these great birds are left in all North America, where their voices once carried across the boundless prairies, or the marshes of the deep south. Curlews are rare in many places. Even the sandhill crane is scarce, compared with its numbers of only a few years past. However, we all thrill to the high, far sound of Canada geese going north in the spring and returning in the fall. This is a truly Canadian sound, which we will try to keep along with all the other sounds of our Canadian and American woods, waters and prairies. "What the birds say" has given, and will still give, happy hours to all who hear, and try to understand.

DRAINAGE DESTRUCTION

Federally subsidized drainage continues to have a disastrous effect on waterfowl resources, according to the Wildlife Management Institute.

Thirty-two thousand potholes were drained last year in Minnesota and North and South Dakota. These states, along with eastern Montana, are the nation's greatest waterfowl producing states.

In the past ten years more than a million acres of prime waterfowl nesting habitat have been destroyed in this manner. Many additional millions of acres of natural marsh areas have been drained, thus destroying habitat for aquatic furbearers and other wildlife, as well as surface and soil water supplies.—*Colorado Outdoors.*

BROWN TROUT

The brown trout is often rather inactive during midday. It feeds more actively in early morning and evening, usually feeding under the water surface consuming large numbers of mayflies, land and water insects and worms, small crayfish and fish.

CHEERS FOR THE FLY-BOYS

The Air Force and the Fish and Wildlife Service have signed a compact to organize game conservation on the vast air base in the United States and its territories.

The service will provide personnel, technical advice and assistance in stocking lakes and streams and woodlands, improve food sources and build up natural cover for game. State game laws will govern fishing and hunting on all air bases. Civilians will be permitted to hunt and fish on the reservations wherever feasible.

Dare we hope the Army, Navy and Marines will follow suit?—*Colorado Outdoors.*

The Des Moines River, Iowa's largest and most important inland stream, is an excellent canoe stream throughout most of its length, except in periods of extreme low water.

The channel catfish is considered the best food fish in the catfish family.